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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,347

09/28/2005

Hiroaki Niwamoto

0033-1024PUS1

4583

2292 7590 01/14/2009  
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EXAMINER

SQUIRES, BRETT S

ART UNIT

PAPER NUMBER

2431

NOTIFICATION DATE

DELIVERY MODE

01/14/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,347	<b>Applicant(s)</b> NIWAMOTO ET AL.	
	<b>Examiner</b> BRETT SQUIRES	<b>Art Unit</b> 2431	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-13 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/28/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-13 and 31-33, classified in class 713, subclass 193, and drawn to a control device and the corresponding method for receiving control contents of an appliance and transmitting information to the appliance.

Group II, claim(s) 14-17, classified in class 726, subclass 28, and drawn to a communication device.

Group III, claim(s) 18-30, classified in class 726, subclass 26, and drawn to control system having a communications device for control, a control device, a relay device, and an appliance.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I, represented by independent claim 1, has the special technical feature of being able to receive the control contents of an appliance directly for the appliance or other diverse sources, Group II, represented by independent claim 14, has the special technical feature of identifying the user of the communication device for control and transmitting the identifying information and receiving reception information based on the identifying information, Group III, represented by independent claim 18, has the special technical feature of controlling an appliance.

The examiner respectfully points out that unity of invention is considered only in relation to the independent claims in an international application and not the dependent claims. Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more special technical features. The expression "special technical feature" is defined in PCT rule 13.2 as meaning those technical features that define a contribution which each of the invention, considered as whole makes over the prior art. The independent claims in Groups I-III each define a different technical feature for novelty of the prior art.

3. Applicants' election with traverse of claims 1-13 and 31-33 in the response filed November 10, 2008 is acknowledged. The traversal is on the grounds that search and examination of claims 1-33 can be made without serious burden. The examiner respectfully points out that the present application is a U.S. national stage application that entered the national stage from international application PCT/JP2004/003050 after compliance with 35 U.S.C. 371. Therefore, the present application is subject to unity of invention practice in accordance with 37 CFR 1.475 and 1.499 and not subject to the U.S. restriction practice detailed in MPEP section 803. The determination unity of invention is based a technical relationship among the claimed inventions recited by the independent claims involving one or more special technical features instead of the U.S. restriction practice where the determination is based on (a) the inventions must be independent or distinct as claimed and (b) there would be a serious burden on the examiner if restriction is not required. Thus, the applicants' argument that the search and examination of claims 1-33 can be made without serious burden is not persuasive.

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Accordingly, the requirement for restriction is still deemed proper and is therefore made **FINAL**.

### ***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a) because Figure 3 fails to show "Third block 118 is a block to establish radio communication with remote-control device 104," as described in the specification on page 22 lines 1-2. Figure 3 shows the third block 118 establishing radio communication with a communication adaptor 108 for an appliance such as an air conditioner 111. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities: the following elements are referred to by incorrect reference numbers on page 15 line 28 "a control unit 105," this should be "a control unit 150," on page 16 line 17 "a key input unit 108," this should be "a key input unit 103," on page 18 lines 24-25 "flash memory 830," this should be "flash memory 803," and on page 23 line 25 "First block 114," this should be "First block 142." Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: the incorrect figure is referred to for the remote control device on page 26 line 8 "the operation screen of Fig. 20," this should be "the operation screen of Fig. 2." Appropriate correction is required.

### ***Claim Objections***

7. Claim 6 is objected to because of the following informalities: claim 6 recites "a user," on line 3 and "a user," on lines 8 it is unclear whether the recited claim limitations are intended to refer to the same user. Appropriate correction is required.

Claim 11 is objected to because of the following informalities: claim 11 recites "transmission source device," on line 3, "a device of said transmission source," on lines

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3-4, and "the device," on line 7 it is unclear whether "the device" is referring to the transmission source device or a device of said transmission source.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 6 recites the limitation "said first information," on line 7. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 10 recites the limitations "said transmission source," on lines 27-28 and "the transmission source" on lines 28-29. There is insufficient antecedent basis for this limitation in the claim. Further, it is unclear whether "said transmission source" and "the transmission source" are referring to the same transmission source.

***Claim Rejections - 35 USC § 101***

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claim 31 is rejected under 35 U.S.C. 101 based on Supreme Court precedent and recent Federal Circuit decisions because the claimed process is not (1) tied to

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another statutory class (a particular machine or apparatus) or (2) transforms underlying subject matter (such as an article or materials) to a different state or thing. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. Claim 31 recites "a control method," that can be performed mentally by an operator reading the gauges of an appliance and manually adjusting the control knobs and buttons on the appliance. While claim 31 recites "an appliance" this alone is not sufficient to tie the control method to a particular machine or apparatus because the appliance does not perform any of the acts recited in the claim. Accordingly, the control method can be performed mentally or manually in a manner that reasonably accomplishes the intended purpose of the recited method without the use of a particular machine or apparatus. See *In re Bilski et al*, 88 USPQ 2d 1385 CAFC (2008); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)

14. Claim 32 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 32 recites "a control program to cause a computer to realize the steps of," this recitation is functional descriptive material and does not fall into at least one of the four statutory classes defined by 35 U.S.C. 101. A



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computer program, such as the recited control program, only imparts functionality when employed as a computer component, such as when a computer program is recorded on a computer readable medium. If a claim covers material not found in any of those four categories, then the claim falls outside the plainly expressed scope of 35 U.S.C. 101, even if the subject matter is otherwise new and useful. *See In re Nuijten 84 USPQ2d 1495 (Fed. Cir. 2007)*

### ***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 3-5, 13, and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang (US 6,133,847).

Regarding Claim 1:

Yang discloses a remote control device having a first communications means ("Data Interface" See fig. 1 ref. no. 110 and col. 3 lines 6-36) for communicating information, generating means ("Functions Interface" See fig. 1 ref. no. 130 and col. 4 lines 6-14) for generating based on operation information ("Interface control signal" See col. 4 lines 6-14) representing control contents of an appliance received by the first communication means, control information representing an operation of the appliance ("Function control icons are generated and displayed by the control program software

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for the particular apparatus to be controlled.” See figs. 3A-3B ref. no. 144 and col. 6 lines 21-35), wherein the generation means includes application storage means (“The downloaded programming code is stored in memory 120 of the remote control device.” See fig. 1 ref. no. 120 and col. 3 lines 7-13) for storing a control application program (“Control Software” See col. 4 lines 6-23) representing information processing to generate the control information, and operation means (“User Interface” See fig. 1 ref. no. 140 and col. 6 lines 7-47) for generating the control information from the operation information by the information processing represented by the control application program, and first control means (“Processor” See fig. 1 ref. no. 135 and col. 4 lines 6-14) for controlling the first communication means such that the control information is transmitted to the appliance.

Regarding Claim 3:

Yang discloses the application storage means includes modification means for storing the control application program such that at least a portion can be modified (“It should be noted that the programming software is only required to be downloaded to the remote control device one time and does not need to be downloaded each time the remote control device is to control a particular appliance.” See col. 4 lines 39-46 [The examiner respectfully points out the memory of the remote control device is non-volatile memory and thus allows for a portion of the programming software to be modified without requiring the programming software to be redownloaded.]).

Regarding Claim 4:

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Yang discloses the application storage means includes means for storing a plurality of the control application programs in correspondence with the appliance ("The network transmitter/receiver could be utilized to download the programming code for each appliance, e.g. TV 510, VCR 520, microwave 530, and stereo 540, to remote control device" See fig. 5 and col. 7 lines 48-57), the control device further comprising select means ("User Interface" and "The software could provide for a separate icon to be displayed in message display window 142 for each appliance that is available to be controlled. In order to control a particular appliance with the remote control device, the user would select the icon that represents the particular appliance." See fig. 1 ref. nos. 140, 142 and col. 8 lines 10-24) for selecting any of the plurality of control application programs based on information identifying ("Interface control signal" and "The remote control device could receive an interface control signal for each of the appliance on the network or in the room." See col. 8 lines 10-24) the appliance received by the first communication means, wherein the operation means includes means for generating the control information by an operation represented by the control application program selected by the select means ("The selection of the icon would provide a control signal to the functions interface and the functions interface would then access the control software for the appliance from memory and configure the user interface function control panel so that it would be configured to control the appliance selected." See col. 8 lines 10-24).

Regarding Claim 5:

Yang discloses the first communication means includes a plurality of communication means selectively used according to a communication destination ("The same medium (e.g. infrared, RF, etc.) is not required to be utilized for transmitting all information in both directions. For example, a cable could be utilized for electrically downloading programming code to the remote control device and an RF link could be utilized to transmit function control signals from the remote control to the appliance." See col. 3 lines 40-46).

Regarding Claim 13:

Yang discloses a second communication means for communicating information ("The same medium (e.g. infrared, RF, etc.) is not required to be utilized for transmitting all information in both directions. For example, a cable could be utilized for electrically downloading programming code to the remote control device and an RF link could be utilized to transmit function control signals from the remote control to the appliance." See col. 3 lines 40-46), and a third control means ("Processor" See fig. 1 ref. no. 135) for controlling the first communication means and the second communications means such that information communicated using one of the first communication means and the second communication means is transmitted using the other of the first communication means and the second communication means to a communication destination ("The code can be downloaded to the remote control device from a source other than the appliance." See col. 7 lines 35-47) differing from the communication destination of the communicated information ("Appliance" See fig. 1 ref. no. 160).

Regarding Claims 31-33:

Yang discloses a method for communicating information ("Data interface 110, in addition to receiving the downloaded programming software code from the appliance, also receives an interface control signal from the appliance on data link 150." See col. 3 lines 47-50), the information including operation information ("Interface control signal" See col. 3 lines 47-65) representing control contents of an appliance ("Appliance" See fig. 1 ref. no. 160), generating the control information representing an operation of the appliance based on said operation information received ("Function control icons are generated and displayed by the control program software for the particular apparatus to be controlled." See figs. 3A-3B ref. no. 144 and col. 6 lines 21-35) and a control application program ("Control Software" See col. 4 lines 6-23) representing information processing to generate the control information, and transmitting the generated control information to the appliance ("Data interface 110 also includes a transmitter 114. Transmitter 114 transmits the function control signal from remote control device 100 to appliance 160 over data link 150 in order to control the appliance." See col. 3 lines 30-36).

### ***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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18. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being obvious over Yang (US 6,133,847) in view of Thorsteinsson et al. (US 2003/0105854).

Regarding Claims 6 and 10-12:

Yang discloses the above stated remote control device having an appliance storage means ("The downloaded programming code is stored in memory 120 of the remote control device." See fig. 1 ref. no. 120 and col. 3 lines 7-13) for storing permitted appliance information representing a permitted appliance of which an operation by a user is permitted in correspondence with the user among the appliances.

Yang does not disclose a second control means for controlling the first communication means such that information including the permitted appliance information corresponding to the user of a transmission source of the communicated information is transmitted to the transmission source in response to reception of user identification information identifying a user of the transmission source of the operation information and an authentication request requesting identification of the appliance by the first communication means.

Thorsteinsson discloses a system for controlling and coordinating devices and appliances from a central portal through a wide-area communication network having a second control means ("Authorization Mechanism" See paragraphs 69-71) for controlling the first communication means such that information including the permitted appliance information corresponding to the user of a transmission source of the communicated information is transmitted to the transmission source in response to reception of user identification information identifying a user of the transmission source of the operation

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information and an authentication request requesting identification of the appliance by the first communication means ("A database table of authorizations is consulted where the tuple [Client Site, User, Device, Command] is mapped to a result which is one of the values [allowed, forbidden, not specified]. See paragraph 71).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the remote control device disclosed by Yang to include an authorization mechanism such as that taught by Thorsteinsson in order to allow only particular users to modify authorization settings. (See Thorsteinsson paragraph 61.)

Regarding Claim 7:

Thorsteinsson discloses commands and command sequence may refer to external variable such as the time of day (See paragraph 60).

Regarding Claims 8-9:

Thorsteinsson discloses a determination means ("Authorization Mechanism" See paragraphs 69-71) for determining whether the control information is to generated or not by the generation means based any of information identifying the user ("A user identifier is included in the tuple used to determine whether a command is allowed or forbidden." See paragraph 71) of the transmission source and information identifying a device of the transmission source ("A client site device identifier is included in the tuple used to determine whether a command is allowed or forbidden." See paragraph 71).

***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRETT SQUIRES whose telephone number is (571) 272-8021. The examiner can normally be reached on 9:30am - 6:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/Christopher A. Revak/  
Primary Examiner, Art Unit 2431